Further in accordance with the present invention, there is provided an electrostatic discharge protection device, comprising: a substrate; a first diffusion region formed in the substrate; a second diffusion region formed in the substrate adjacent to and spaced from the first diffusion region; contacts for making a conductive connection to the first diffusion region; a channel formed in a third region between the first and second diffusion regions; and a plurality of current divider segments formed within the first diffusion region, the respective segments each formed into one of at least two different shapes, two different sizes, two different orientations, or two different spacings (gaps) between adjacent current divider segments.

IN THE CLAIMS:

Please amend claims 83-85 and 88 and add new claims 96-122, as follows:

83. (Amended) An electrostatic discharge protection device, comprising:

a substrate;

a first diffusion region formed in the substrate;

a second diffusion region formed in the substrate adjacent to and spaced from the first diffusion region;

at least one contact for making a conductive connection to the first diffusion region;

a channel formed in a third region between the first and second diffusion regions; and

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a plurality of current divider segments unevenly distributed within the first diffusion region.

84. (Amended) The device of claim 96, wherein the different shapes are selected from a square, a circle, a cross shape, a T shape, a V shape, a U shape, and an L shape.

85. (Amended) The device of claim 96, wherein the different shapes differ from each other with respect to at least one of length, width, size, and area.

88. (Amended) The device of claim 83, wherein

the plurality of segments includes a first row of segments;

each one of the first row of segments has a center-of-area, the respective centers-of-area being one of aligned or not aligned.

--96. (New) The device of claim 83, wherein said segments include first and second segments formed in different shapes.

97. (New) The device of claim 83, wherein said segments include first and second segments formed in different sizes.

98. (New) The device of claim 83, wherein said segments include first and second segments formed in different orientations.

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99. (New) The device of claim 83, wherein said segments include first and second segments formed of different constructions.

100. (New) The device of claim 99, wherein said segments include the first segment formed of a polysilicon layer over a dielectric layer; and the second segment formed of a field oxide layer.

101. (New) The device of claim 83, wherein

said segments include a first segment spaced apart by a first gap from an adjacent second segment;

said segments further include a third segment spaced apart by a second gap from an adjacent fourth segment; and

said first gap being larger than the second gap.

102. (New) The device of claim 101, wherein the second segment is the third segment.

103. (New) The device of claim 83, wherein said segments include

a first segment having a first center-of-area being spaced apart from an adjacent second segment having a second center-of-area;

a third segment having a third center-of-area being spaced apart from an adjacent fourth segment having a fourth center-of-area; wherein

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a first distance between the first and second centers-of-area;

a second distance between the third and fourth centers-of-area; and

the first distance being larger than the second distance.

104. (New) The device of claim 103, wherein the second segment and the third segment are the same segment.

105. (New) The device of claim 83, further including a dielectric layer formed over the channel.

106. (New) The device of claim 105, further including a conductive element formed over the dielectric layer.

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107. (New) The device of claim 106, wherein

the conductive element is a polysilicon gate element; and

the dielectric layer is an oxide layer.

108. (New) The device of claim 83, wherein at least one of the segments is positioned between the at least one contact and the channel.

109. (New) The device of claim 83, wherein the segments include at least a first segment formed of a dielectric layer.

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110. (New) The device of claim 109, wherein the dielectric layer is a field oxide layer.

111. (New) The device of claim 110, wherein the field oxide layer is formed by one of a LOCOS process and a trench isolation process.

112. (New) The device of claim 83, wherein the segments include at least a first segment formed of a conductive layer over a dielectric layer.

113. (New) The device of claim 112, wherein

the conductive layer is a polysilicon layer; and

the dielectric layer is a gate oxide layer.

114. (New) The device of claim 83, wherein at least one of said segments has a shape selected from a square, a circle, a cross shape, a T shape, a V shape, a U shape, and an L shape.

115. (New) The device of claim 83 wherein at least one of said segments has a first portion in a shape selected from a square, a circle, a cross shape, a T shape, a V shape, a U shape, and L shape.

116. (New) The device of claim 83, wherein

each one of said segments has a center-of-area; and

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at least a first center-of-area being not aligned with a second and a third centers-of-area.

117. (New) The device of claim 90, wherein the largest dimension of each of the segments is less than 4.5 times a length of the channel.

118. (New) The device of claim 90, wherein the largest dimension of each of the segments is less than 2.5 times a length of the channel.

119. (New) An electrostatic discharge protection device, comprising:

a substrate;

a first diffusion region formed in the substrate;

a second diffusion region formed in the substrate adjacent to and spaced from the first diffusion region;

at least one contact for making a conductive connection to the first diffusion region;

a channel formed in a third region between the first and second diffusion regions;

a first current divider segment formed within the first diffusion region having a first portion oriented at an angle to the channel region.

120. (New) The device of claim 119, wherein the first current divider segment further having a second portion oriented at a second angle to the first portion.

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